# **Axial Lead & Cartridge Fuses**

5×20 mm > Time-Lag > 477 Series



#### **Electrical Characteristic**

Amp Code	Amp Rating	Max Voltage Rating (V)		Interrupting Rating	Nominal Cold Resistance (Milli-ohms)	Nominal Melting I²t (A² sec.)† .	Agency Approvals				
							PS E	c <b>FV</b> us	$(\mathbb{Z})$	$\mathbf{A}$	VDE
500	0.5	AC	DC		1055.000	0.000	$\sim$				
.500	0.5	500	400		1055.900	0.300		X*	X**		
.800	0.8	500	400	100A@500VAC 1500A@400VDC	430.000	0.909		x*	x**		
001.	1	500	400		139.400	1.800	х	x*	x**		x
002.	2	500	400		55.200	9.120	х	X*	x**		
3.15	3.15	500	400		27.700	50.109	х	X*	x**		x
004.	4	500	400	100A@500VAC 500A@400VDC	17.200	52.480	х	X*	x**		
005.	5	500	400		13.700	76.500	х	X*	x**		
06.3	6.3	500	400		10.970	121.451	х	x	x**		
008.	8	500	400		8.305	203.520	х	X	x**		
010.	10	500	400		4.950	509.000	х	x		x	
012.	12	500	400		4.730	576.000	х	x		x	
016.	16	500	400	100A@500VAC 400A@400VDC	3.100	1331.200	х	×		x***	

\*100A @ 600Vac also available. Add suffix "MXE6P". Example: 0477004.MXE6P.

\*\*Semko approval for 100A@500Vac and 200A@400Vdc. \*\*\*100A@ 500Vac and 300A@400Vdc for 16A

<sup>+</sup>l<sup>2</sup>t test at 10x rated current.



#### **Average Time Current Curves**



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#### **Soldering Parameters - Wave Soldering**



#### **Recommended Process Parameters:**

Wave Parameter	Lead-Free Recommendation		
Preheat: (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)		
Temperature Minimum:	100°C		
Temperature Maximum:	150°C		
Preheat Time:	60-180 seconds		
Solder Pot Temperature:	260°C Maximum		
Solder Dwell Time:	2-5 seconds		

#### **Recommended Hand-Solder Parameters:**

Solder Iron Temperature: 350°C +/- 5°C Heating Time: 5 seconds max.

Note: These devices are not recommended for IR or Convection Reflow process.

#### **Product Characteristics**

Materials	Body: Ceramic Cap: Nickel–plated Brass Leads: Tin–plated Copper
Terminal Strength	MIL-STD-202, Method 211, Test Condition A
Solderability	MIL-STD-202 Method 208
Product Marking	Cap 1: Brand logo, current and voltage ratings Cap 2: Series and agency approval markings
Packaging	Available in Bulk (M=1000 pcs/pkg)

### Dimensions



Operating Temperature	-55°C to +125°C		
Thermal Shock	MIL-STD-202, Method 107, Test Condition B (5 cycles, –65°C to +125°C)		
Vibration	MIL-STD-202, Method 201		
Humidity	MIL-STD-202, Method 103, Test Condition A (High RH (95%) and elevated temp (40°C) for 240 hours)		
Salt Spray	MIL-STD-202, Method 101, Test Condition B		

## Part Numbering System



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Packaging								
Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size				
477 Series								
Bulk	N/A	1000	MX	N/A				
Bulk	N/A	1000	MXE	N/A				
Reel and Tape	N/A	1000	MRET1	T1=53mm (2.087")				

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